Kauffmann, F., Tessier, J.F., Oriol, P. "Adult Passive Smoking In The Home Environment: A Risk Factor For Chronic Airflow Limitation" American Journal of Epidemiology 117: 269-280, 1983.

SUMMARY: Using the data of the French Cooperative Study PAARC (Pollution Atmospherique et Affections Respiratoires Chroniques), which in 1975 surveyed more than 7800 adult residents of seven cities throughout France, the authors compared the spirometric measurements of two groups of nonsmokers: those with and without exposure to passive smoking in the home. They restricted the analysis to subjects aged 40 years of [sic] more (i.e., those presumably exposed for 15 years or more to smoking by their spouses) and who were living in households without other persons aged 18 years or older (to avoid potential misclassification as true nonsmokers of persons living with non-interviewed individuals). The authors found that nonsmoking subjects of either sex whose spouses were current smokers of at least 10 g of tobacco a day had significantly lower forced mid-expiratory flow rate (FEF 25-75) than those married to nonsmokers. This difference was not explained by social class, educational level, air pollution, or family size. Women, among whom passive smoking is much more prevalent than it is among men, also showed a significant difference in forced expiratory volume in one second (FEV1), and a clear dose-effect relationship to amount of smoking by their husbands was found in the large subgroup of women without paid work (i.e., those not exposed to workplace smoking).